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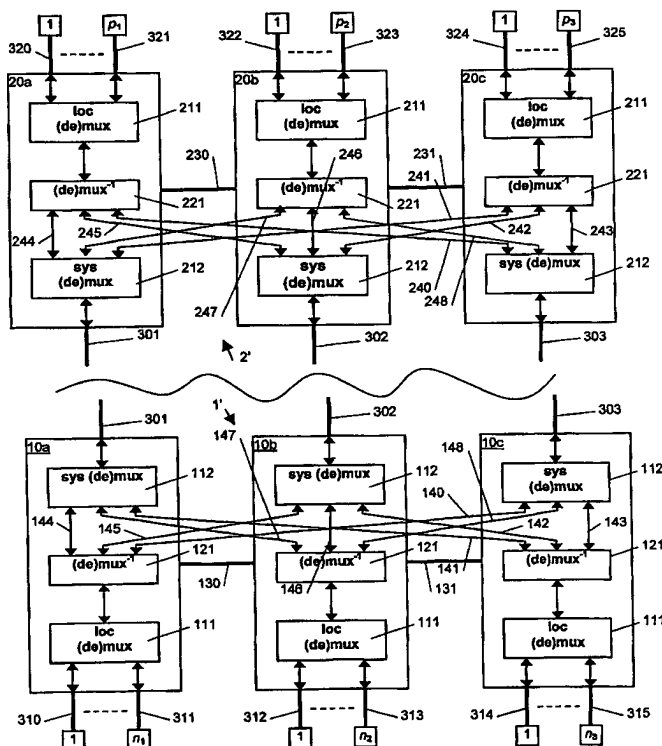
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(54) Title: CONNECTING SYSTEM, INVERSE MULTIPLEXER, DATA COMMUNICATION NETWORK, METHOD AND COMPUTER PROGRAM

(57) Abstract: Throughput between nodes such as personal computer and a subnetwork such as the Internet is increased by using inverse multiplexing over multiple intersubnetwork connections such as local loop telephone lines of different users. The different nodes share the multiple intersubnetwork connections with each other, so that the efficiency of the use of the intersubnetwork connections is increased. Each of the nodes is capable of receiving and/or transmitting inverse -multiplexed data signals over the same plurality of intersubnetwork connections. Preferably, to this end, at each node, use is made of a separate connecting device which is, on the one side, locally coupled to the node and an intersubnetwork connection and is, on the other side, remotely coupled to one or more other such connecting devices. Such connecting devices are, for instance, placed in different housings, each with, for instance, a regular connection with a local computer and, for instance, a wireless transmission connection to corresponding connecting devices in neighboring housings. The interchanged data are inverse -multiplexed and transmitted via the intersubnetwork connections as inverse multiplex data.

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